

This article was reproduced from the January/February 2004 issue of *Update*, the Bureau of Diplomatic Security's internal newsletter.

## Security Engineers Renovate A Vital Embassy Hub

You have to admit that entering a U.S. embassy or consulate can be intimidating. The first thing you see is an armed Marine in a bullet-proof booth—Post One—the mission's hub for all security activities. Occupied around the clock, every day of the year, by specially trained Marine Security Guards (MSGs), Post One is, in many ways, the functional heart of the mission. Ironically, Post Ones are sometimes small and not always structured to make it easy for the Marines to do their job. Also, with the technical and physical security improvements that have been put in place to combat terrorist activities, Post One's utility has grown. The additional state-of-the-art equipment that improves our security posture claims precious space. To make matters worse, Post Ones are often overlooked during post remodeling projects and, as a result, this critical space is usually in dire need of an upgrade.

ESC Frankfurt (the Diplomatic Security Engineering Services Center headquartered in Frankfurt, Germany) is making an effort to address this problem.



What does it all mean? Post One can begin to lose its functionality and interfere with the efficiency of MSGs standing watch. During a typical shift, they must issue badges and keys, view security monitors, answer phones, control access to the compound and chancery, operate the two-way radio, monitor fire doors and alarm panels, make announcements over the emergency notification system, and conduct emergency drills. If the Post One

layout is not optimized, the MSG will not be as effective, and our security posture is jeopardized. For example, equipment could block the Marine Security Guard's views of the chancery or security monitors, small countertops will restrict use of logbooks or computers, poor lighting makes it difficult to see, and inadequate power or cable distribution could make the equipment difficult to view or access.

To resolve this situation at many of its constituent posts in Europe, ESC Frankfurt initiated a program to renovate Post Ones at key missions. These renovations were based on the science of ergonomics, which is the study of equipment design in order to reduce operator fatigue and discomfort. After completing their study, ESC personnel renovated Post Ones in Minsk and Berlin using the information gained from their research. U.S. Navy Seabees assigned to the ESC designed new countertops and shelves. In Minsk, they were built and installed by the Seabees; in Berlin, by General Services Office carpenters and the Seabees. Security engineering officers and security technical specialists selected a layout to position CCTV monitors and equipment for optimum viewing in all light conditions with easily accessible controls. To consolidate space, equipment cabling was rerouted and placed in bundles. The reconfigured Post One made it possible for the Marine Security Guard to see what was happening with a quick glance.

CONTINUED ON PAGE 2





## Behind the Scenes

### Page 2

Logbooks were now at their fingertips and doors could be opened with a touch of a nearby button. Good news travels fast and as word of the renovations spread, ESC Frankfurt was asked to renovate additional Post Ones in the European region.

While the first renovations were very successful and extremely well received, cost factors and the amount of work these projects entailed put a strain on resources, limiting the Center's ability to perform much needed renovations at more missions. A collaboration with another program element, DS/FSE/PME, will enable ESC Frankfurt to provide better service in less time.

The first renovation under the ESC/PME partnership was in Kiev. The old Post One was small and dark, and space was taken up by two equipment racks. Because logbooks and computers were located on small countertops or shelves throughout Post One, the watch stander was required to move from one side to the other to complete different tasks. Over the years, numerous equipment installations left a crisscross of conduit on the walls and ceiling.

Equipment had been installed where there was space and not necessarily where convenient for the Marine to operate. This Post One proved to be a challenge. Wiring was consolidated and extra conduit removed. Monitors were relocated above the window and remaining technical security equipment situated so the Marine Security Guard could perform most of the tasks without bending or twisting. Walls were painted, new carpet laid, and new lighting installed. On the back wall, wooden latticework and curtains were installed to cover electrical conduits, cable trays, and power panels. The low cost of carpentry and labor allowed a local contractor to produce a high quality wooden desk, shelves, and countertops. Now the MSG can perform all tasks without taking more than one or two steps, a major improvement.

Every Post One is different and provides unique challenges. ESC Frankfurt's Post One renovation team readily accepts these challenges and is rewarded when the finished product is an efficient, fully functional Post One. ⚙️